



AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1 – 4 (Canceled)

5. (Previously Presented) A liquid crystal display for image display using a liquid crystal display panel, comprising:

a write-gray scale level determining section for determining write-gray scale level data for input image data that compensates an optical response characteristic of the liquid crystal display panel, in accordance with, at least, a combination of gray scale level transitions from a previous vertical display period to a current vertical display period;

an achievable gray scale level determining section for generating achievable gray scale level data for input image data after a lapse of one vertical display period of the liquid crystal display panel, in accordance with, at least, a combination of gray scale level transitions from one vertical display period to the next; and

a temperature detector for detecting a device interior temperature,

wherein the write-gray scale level determining section determines the write-gray scale level data to be supplied to the liquid crystal display panel, based on achievable gray scale level data of the liquid crystal display panel, corresponding to input image data at the previous vertical

display period, output from the achievable gray scale level determining section and the input image data at the current vertical display period, and

wherein the achievable gray scale level determining section, based on the detected device interior temperature, determines the achievable gray scale level data for the input image data after the lapse of one vertical display period of the liquid crystal display panel.

6. (Previously Presented) The liquid crystal display according to Claim 5, wherein the write-gray scale level determining section, based on the detected device interior temperature, determines the write-gray scale level data for compensating the optical response characteristic of the liquid crystal display panel.

7. (New) The liquid crystal display according to Claim 5, wherein the achievable gray scale level determining section has a table memory that stores an achievable gray scale level parameter for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly, said achievable gray scale level parameter being obtained from an actual measurement of the optical response characteristic of the liquid crystal display panel, and, based on the detected device interior temperature and the achievable gray scale level parameter, determines the achievable gray scale level data after the lapse of one vertical display period of the liquid crystal display panel, in accordance with the input image data.

8. (New) A liquid crystal display for image display using a liquid crystal display panel, comprising:

a write-gray scale level determining means for determining write-gray scale level data for input image data that compensates an optical response characteristic of the liquid crystal display panel, in accordance with, at least, a combination of gray scale level transitions from a previous vertical display period to a current vertical display period; and

an achievable gray scale level determining means for generating achievable gray scale level data for input image data after a lapse of one vertical display period of the liquid crystal display panel, in accordance with, at least, a combination of gray scale level transitions from one vertical display period to the next,

wherein the write-gray scale level determining means determines the write-gray scale level data to be supplied to the liquid crystal display panel, based on achievable gray scale level data of the liquid crystal display panel, corresponding to input image data at the previous vertical display period, output from the achievable gray scale level determining means and the input image data at the current vertical display period, and

wherein the achievable gray scale level determining section has a table memory that stores a transition parameter for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly, and, based on the achievable gray scale level parameter, determines the achievable gray scale level data after the lapse of one vertical display period of the liquid crystal display panel, in accordance with the input image data.